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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/990,570

11/21/2001

John M. Fenderson

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7590

08/06/2008

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EXAMINER

ARNOLD, ERNST V

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/990,570	<b>Applicant(s)</b> FENDERSON ET AL.	
	<b>Examiner</b> ERNST V. ARNOLD	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/236,732.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### DETAILED ACTION

Applicant is advised that the Notice of Allowance mailed 1/30/06 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

After careful review of the prosecution history, it has been noted that application 08/911,926 (US 5,990,046) is a *voluntary* Divisional application of 08/467,364 (US 5,716,901).

The Oath is objected to for being defective because it does not claim foreign priority. See MPEP 1417 [R-5]: A "claim" for the benefit of an earlier filing date in a foreign country under 35 U.S.C. 119(a)-(d) must be made in a reissue application, even though such a claim was previously made in the application for the original patent to be reissued. However, no additional certified copy of the foreign application is necessary. The procedure is similar to that for "Continuing Applications" in MPEP § 201.14(b).

In addition, 37 CFR 1.63 requires that in any application in which a claim for foreign priority is made pursuant to 37 CFR 1.55, the oath or declaration must identify the foreign application for patent or inventors' certificate on which priority is claimed unless supplied on an application data sheet (37 CFR 1.76), and any foreign

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applications having a filing date before that of the application on which priority is claimed, by specifying:

- (A) the application number of the foreign application;
- (B) the foreign country or intellectual property authority; and
- (C) the day, month, and year of the filing of the foreign application.

The new PTO/SB/51 oath form in the MPEP has the check box for foreign priority and is dated (10-05) or later.

Claims 1-24 are rejected as being based upon a defective reissue OATH under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the OATH is set forth in the discussion above in this Office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harr et al. (Weeds 1991) in view of Lee (US 5,336,662) and Markley et al. (US 4,824,475).

Applicant claims herbicidal compositions of dimethenamid and a second herbicide selected from the group consisting of triketone or dione and triazine herbicides. Applicant claims methods of controlling undesired plant growth .

### **Determination of the scope and content of the prior art**

#### **(MPEP 2141.01)**

Harr et al. teach that SAN 582 H (dimethenamid) is a new pre-emergence herbicide that offers reliable weed control under a wide variety of climates and soil types and is selective in corn and soybeans (Abstract and Introduction). Harr et al. teach that SAN 582 H can be used with other standard herbicides to achieve broader spectrum of weed control (Abstract and page 92). Harr et al. teach pre-emergence to very early post emergence applications (page 89). Harr et al. teach methods of controlling weeds by applying SAN 582 H to various weeds (0.75-1.5 kg AI/ha) and when used in mixtures the rates of application will have to be adapted (pages 91-92, text and Tables 2 and 3).

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Lee teaches 2,6,6-trimethyl-4-(4-chloro-nitrobenzoyl)-2H-1,2-oxazine-3,5-(4H,6H)-dione as a particularly preferred herbicide (column 3, lines 49-51 and see Table A and claim 1) which can be applied either pre- or post-emergent (column 7, lines 38-41) and where the optimum usage is readily determined by one of ordinary skill in the art (column 7, lines 55-57).

Markley et al. teach triazines such as atrazine as herbicides (Abstract and claims 1, 11 and 12). Markley et al. teach that triazine alone or in combination can be applied at planting (pre-emergent) or very early post-emergently (Abstract and claims 29 and 30). Markley et al. teach methods of controlling weeds, in the presence of corn, by applying an herbicidally effective amount of the composition (claims 21-30).

### **Ascertainment of the difference between the prior art and the claims**

#### **(MPEP 2141.02)**

1. The difference between the instant application and Harr et al. is that Harr et al. do not expressly teach a composition or method combining dimethenamid with a triketon or diketone (at a weight ratio of between 1:2 and 1:10 relative to dimethenamid content) and/or triazine (at a weight ratio of 3:1 or 1:3 relative to dimethenamid content). This deficiency in Harr et al. is cured by the teachings of Lee and Markley et al.

### **Finding of prima facie obviousness**

#### **Rational and Motivation (MPEP 2142-2143)**

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a composition or perform the method of Harr et al. by combining dimethenamid with a triketone or diketone (at a weight ratio of between 1:2 and 1:10 relative to dimethenamid content) and/or triazine (at a weight ratio of 3:1 or 1:3 relative to dimethenamid content), as suggested by Lee and Markley et al., and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Harr et al. suggest adding other standard herbicides to achieve a broader spectrum of weed control and adjusting the amount of ingredients. Lee and Markley et al. teach the instantly claimed herbicides as known in the art. It is the Examiner's position that the amount of a specific ingredient in a composition is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient needed to achieve the desired results such as ratios of 1:1 or 1:10 of actives. Thus, absent some demonstration of unexpected results from the claimed parameters, the optimization of ingredient amounts would have been obvious at the time of applicant's invention. *The predictable result is formulation of yet another herbicide composition that works to control undesired plant growth.*

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In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



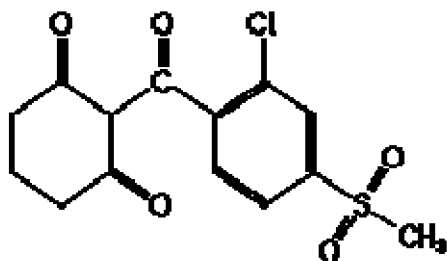
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Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 5,716,901 in view of Lee (US 5,336,662). Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant invention embraces or is embraced by the subject matter disclosed in the patent. The '901 patent discloses in claims 1-5:

**What is claimed is:**

1. A synergistic herbicidal composition comprising a  
25 herbicidally effective aggregate amount of sulcotrione and  
dimethenamid in a weight ratio between 1:2 and 1:10, and  
atrazine in a weight ratio of 3:1 to 1:3 relative to the  
dimethenamid content.
2. A method of controlling undesired plant growth in the  
30 presence of a crop comprising applying to locus of said  
undesired plant growth a herbicidally effective aggregate  
amount of dimethenamid, sulcotrione and atrazine, wherein  
the application rate of dimethenamid is from 0.1 to 3.0 kg/ha  
and the application rate of sulcotrione is from 0.05 to 2.0  
35 kg/ha.
3. The method according to claim 2 wherein the applica-  
tion rate of dimethenamid is from 0.25 to 1.5 kg/ha, the  
application rate of sulcotrione is from 0.1 to 0.6 kg/ha.
4. The method according to claim 2 wherein the  
40 dimethenamid, sulcotrione and atrazine are applied poste-  
mergence.
5. The method according to claim 1 wherein the crop is  
maize.

Sulcotrione is: 2-[2-chloro-4-(methylsulfonyl)benzoyl]-1,3-cyclohexanedione with  
the structure:



The reference of Lee is discussed in detail above and that discussion is hereby incorporated by reference.

The '901 patent does not expressly disclose adding 2,6,6-trimethyl-4-(4-chloro-nitrobenzoyl)-2H-1,2-oxazine-3,5-(4H,6H)-dione to the composition or use in the method and it does not expressly disclose application pre- or post-emergence.

However, the comprising language of the patent allows for the addition of other ingredients and it would be obvious to add other herbicides, such as those taught by Lee, to the composition to achieve same purpose. Furthermore, one of ordinary skill in the art can determine the optimal time of application whether that is pre- or post-emergence in the absence of evidence to the contrary. Therefore, the Examiner can only conclude that one of ordinary skill in the art would have recognized the obvious variation of the instant invention over the patented subject matter.

### ***Double Patenting***

Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 7, and 9 of U.S. Patent No. 5,900,388 in view of Lee (US 5,336,662) and Markley et al. (US 4,824,475). The patented subject matter discloses herbicidal compositions of dimethanamid and a cyclohexanedione

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and methods of controlling undesired plant growth (claims 1, 7 and 9). The patent discloses applying 0.1 to 3.0 kg/ha of dimethenamid (claim 4).

The references of Lee and Markley et al. are discussed in detail above and that discussion is hereby incorporated by reference.

The patent does not expressly teach compositions comprising a triazine such as atrazine or 2,6,6-trimethyl-4-(4-chloro-nitrobenzoyl)-2H-1,2-oxazine-3,5-(4H,6H)-dione in the instantly claimed ratio relative to dimethenamid content. The patent does not expressly teach pre-emergence application of the composition.

However, the comprising language of the patent allows for the addition of other ingredients and it would be obvious to add other herbicides, such as those taught by Lee and Markley et al., to the composition to achieve same purpose. Furthermore, one of ordinary skill in the art can determine the optimal time of application whether that is pre- or post-emergence in the absence of evidence to the contrary. In addition, it is the Examiner's position that the amount of a specific ingredient in a composition is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient needed to achieve the desired results such as ratios of 1:1 or 1:10 of actives. Thus, absent some demonstration of unexpected results from the claimed parameters, the optimization of ingredient amounts would have been obvious at the time of applicant's invention. *The*

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*predictable result is formulation of yet another herbicide composition that works to control undesired plant growth.*

Therefore, the Examiner can only conclude that one of ordinary skill in the art would have recognized the obvious variation of the instant invention over the patented subject matter.

### **Conclusion**

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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